

Light industry program fact sheet

Wastewater management

Wastewater is water that has been affected by human use through domestic, industrial, commercial or agricultural activities including surface water runoff and stormwater.

Sewage and grey water that flows into a sewer or sceptic system is regulated differently and outside the scope of this fact sheet.

Wastewater can be generated through activities such as:

- washing vehicles, trucks, tools and machinery
- degreasing engines and parts
- pressure washing or mopping workshop floors
- wet cutting stone
- industrial processes, such as using water in cooling towers.



Cleaning with biodegradable, ecofriendly chemicals or simply water

While most products labelled 'biodegradable' and 'eco-friendly' are designed to break down quickly, they still have an impact if they enter the environment. Cleaning with such products still generates wastewater, which is not safe to be discharged into the environment.

Additionally, the wastewater will contain the material being washed off – such as oils, red dirt, brake dust, paint and primer – which may also be harmful to the environment.

The same applies when not using any chemicals or detergents and washing solely with water. The material being washed off may still be environmentally harmful, especially the cumulative impact from several light industrial premises. This runoff is still considered wastewater.

How to manage wastewater

There are various options for the appropriate disposal of wastewater. In some cases, a combination of options will be most suitable.

Discharge to sewer: Some premises may be able to discharge wastewater to the Water Corporation's sewer system but not all wastewater is compatible. The Water Corporation considers any wastewater discharged from a business to be trade waste other than from office facilities and staff amenities. All commercial businesses discharging trade waste to the Water Corporation's sewer system require a trade waste permit. For information on how to get a permit, visit Trade waste - Water Corporation.

On-site treatment and disposal: In unsewered areas an on-site treatment and disposal system, such as a leach drain, may be used to manage wastewater. On-site systems must be approved by the local government and/or Department of Health. Contact the local authority for more information.

Collection and off site disposal: Wastewater may be collected in suitable containers on the premises, such as intermediate bulk containers (IBC) and stored in secured, covered and bunded

areas. This wastewater can then be periodically collected by a licenced controlled waste carrier for appropriate disposal at a waste facility. A licensed carrier must be engaged to dispose of controlled waste and receipts kept. For more information about waste holder responsibilities, go to Controlled waste fact sheet 2 — Requirements of waste holders.

On site treatment prior to disposal: Sometimes treatment systems are recommended to separate contaminates from the wastewater and reduce the volume requiring management before disposal or discharge. Common systems are:



- Oil water plate separators for removing hydrocarbons (fuel and oils) from car washes etc
- Grease arrestors/traps to pre-treat greasy/oily waste, generally from kitchens
- Coalescing plate separators to remove suspended solids and oily wastes.

Following treatment, the water component can generally be discharged to Water Corporation's sewer under a trade waste permit. The oily or solid wastes from treatment systems need to be disposed of at an appropriately licenced facility. Depending on the nature of the waste, transport by a licenced controlled waste carrier may be required.

Wastewater recycling unit: At some premises, an on-site wastewater recycling unit may be a feasible option for wastewater management. These units usually require local government approval. Contact the local authority for information on how to get approval for a wastewater recycling unit.

Outsourcing: Some activities which generate wastewater can be outsourced to an off-site facility such as sending machinery, vehicles or tools to be washed or degreased at another facility. The off-site premises must be appropriately equipped to manage wastewater. Outsourcing all wastewater-generating activities is unlikely to be possible, however, so appropriate on-site management options are still necessary.



Wastewater in the environment

Wastewater generally enters the environment via discharge to unsealed ground such as soak wells or unpaved yards. If stormwater has access to hardstand areas which connect to the environment, then harmful materials may enter during rain events. In such cases, wastewater must not be

discharged to hardstand areas which connect to the environment, stormwater drains, soakwells or unsealed ground.

Pervious soakwells, pits and drains: Wastewater discharged into unsealed, pervious soakwells, pits or drains may migrate into the surrounding soil with the potential to cause soil and groundwater impacts. Soil contamination may be registered on the property's Certificate of Title.

Drains discharging off site: Wastewater entering drains which discharge into the environment outside the premises such as open drains, compensation basins and streams and rivers, may migrate into surface waters and directly impact plants and wildlife.

Why wastewater cannot be allowed to enter a stormwater drain

The stormwater system is designed to carry uncontaminated rainfall runoff only. This may be from hardstand and roofed areas. It is not designed to carry wastewater or receive environmentally



harmful materials. This includes stormwater that may have picked up contaminates from industrial areas such as hardstands. The runoff which enters the stormwater drain is carried in underground pipes or open ditches and discharged untreated into local streams, rivers and other wetlands and surface water bodies.

How to maintain good wastewater management practices

- Ensure pollution control equipment components, such as sediment traps and coalescent separators, are regularly serviced and operating efficiently.
- Use quick-break degreasers to ensure treatment devices work properly. This helps to ensure contaminants, such as oil, separate from wastewater shortly after cleaning.
- Use biodegradable, phosphate-free detergents.
- Use dedicated parts washers to clean small parts.
- Mop workshop floors rather than hosing or pressure washing.
- Clearly mark on the site all drains that connect to the environment (soakwells and stormwater drains). This will raise awareness of the pollution risk.

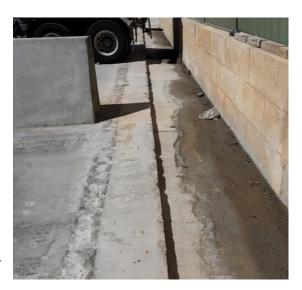
Consequences of wastewater discharging to the environment

In accordance with the <u>Environmental Protection (Unauthorised Discharges) Regulations 2004</u> a person who in connection with a business or a commercial activity, causes or allows a material listed in Schedule 1 to be discharged into the environment commits an offence.

A business or industrial operator allowing wastewater to enter the environment will be liable to enforcement actions. These sanctions may include formal letters of warning, infringement notices, modified penalty fines or court prosecution. For a body corporate, the penalty may be increased to \$25,000 under Section 40 of the *Sentencing Act 1995*.

In addition to potential enforcement actions, discharges of environmentally harmful materials into the environment can result in:

- costly clean-up fees
- site contamination issues, with potential for being registered on Certificates of Title, impacting property values.



Further information about unauthorised discharges can be found in our <u>Environmental Protection</u> (<u>Unauthorised Discharges</u>) Regulations 2004: fact sheet.

Reporting inappropriate discharge of wastewater

Under section 72 of the *Environmental Protection Act 1986*, companies must report discharges of waste likely to cause pollution or environmental harm.

Reports should be made to the department as soon as practicable by contacting the Environment Watch Hotline on 1300 784 782. Further information about your obligations under s72 can be found at <u>Duty to notify of waste discharge</u>.

